Technology in Action

VOL. 2 • ISSUE 3 • NOVEMBER, 2006

Transition Planning

Assistive Technology Supports and Services

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What can be done to help AT users as they make the transition from the school to the community? Find out some of the skills and supports to ensure AT success in new settings.

A Story About Barbara

Barbara has cerebral palsy and uses a power wheelchair to get around. She has used an augmentative communication system since she was four years old. There was special adapted computer equipment that allowed her to use a single switch to do computer data entry at her job preparation placement during high school. She kept the mailing lists up to date at the office where she worked. She also compiled survey data for several different offices in her company.

She got her first high tech augmentative communication system when she was in high school. It provided her with hundreds of speech options. It sounded good, was easy for Barbara to use, and she loved it. She used it regularly and the people in her life learned how much she had to say.

After Barbara completed high school she moved to a group home, got her first supported job, and began the routine of going to work every day instead of going to school. After about two weeks of work, her communication device stopped coming to work with her. Her job coach called the group home and asked them to send it with her. Barbara had her communication device for a few more days but then stopped bringing it again. When the job coach followed up she was told that the charger was missing. For the next two years, Barbara had no communication system at all.

Unfortunately, stories like Barbara's are not uncommon. If you have been involved with someone who uses assistive technology (AT), you know that transition periods can present many problems. Transitions from one class to another or from one school to another require coordination and, frequently, changes in how the technology is used and supported. The transition from school to independent life in the community can require even more coordination!

Technology and Media Division

What can be done to help AT users as they make the transition from the school to the community? Even when transitions are well planned and students leave school as competent AT users, things might not go well (Fried-Oken, Bersani, Anctil, & Bowser 1998). Students like Barbara, who are very skilled at using their AT in school, sometimes stop using it after they leave school. Others who were not skilled users may gain skills and use their technology more independently.

What makes the difference? The work of Project TechTrans (Fried-Oken et al., 1998) indicates that, in addition to having good AT skills, successful adult users of such technology are able to advocate for themselves and have skills that allow them to be, to the best of their ability, self-determined adults.

This edition of the TAM *Tech In Action* series offers an overview of the kinds of skills and supports that AT users need when they make the transition to new communities or educational environments. Our purpose is to assist the IEP team in making decisions about the technology devices and services that will support such transitions.

The Transition Plan

Many considerations relating to AT—transportability and durability, for example—become more important during transition when planning for independence becomes critical. The supports in post-school settings are different from the supports planned for and provided by school IEP teams. While public schools are required to provide supports for students who need them, adult AT users must know how to locate and request the services, supports, and funding they need. Care providers and adult service agencies an individual may encounter after leaving high school also must be involved to ensure that AT moves transparently and efficiently with the transitioning student.

One important strategy is to ensure that each student acquires the self-determination skills to deal with the challenges that arise in everyday life and to advocate for all of their needs, including AT.

Implementing a transition plan and coordinated set of activities requires all IEP team members to make a commitment to promoting adult success for youths with disabilities. A transition plan is an ongoing process. At a minimum it should be revisited as part of the annual IEP team review. The plan provides the framework, but the process should remain open to allow for necessary adjustments. All team members must be aware of the IEP goals and planned activities so that everyone can reinforce progress toward transition goals.

The transition plan helps the receiving agency or team ensure that needed supports are in place for the AT user. To that end, the following factors should be considered when developing the plan:

- Instruction (software for productivity, such as Microsoft Office and Netscape, and accessibility features found in operating systems).
- Related services (communication devices, physical devices, and job accommodation hardware such as alternative keyboards and text-to-speech software).
- Community experiences (choice-making hardware and software, survival sign training [Q: what is this?], travel training, and social skills development).
- Post-school adult living objectives (environmental control devices, expanded curriculum goals for students who are blind).
- Functional vocational evaluation (new computer platforms, AT to increase performance and productivity).
- Daily living skills (AT for self-care or for independent living).

Importance of Transitioning and IDEA

According to IDEA 2004, AT is defined as an item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a student with a disability (Individuals with Disabilities Education Improvement Act of 2004, H.R.).

Transition planning should proceed according to an individualized timeline that is linked to IEP goals for building general skills and for making a successful transition. The timeline and goals should be adjusted as necessary to address the specific needs of the student and the changing environment. A timeline will help the team members determine the point at which the student should become independent and the tasks that will be necessary to ensure that the student can achieve as much independence as possible.

An example of a typical IEP goal for a student in transition is, "Jeff will follow two- to four-step directions with 100 percent independence."

The timeline and the steps to help Jeff learn to follow directions with independence might begin in a supported employment environment, but a plan should be in place to decrease the supports according to Jeff's changing needs. This will help him develop the skills he will need to function independently in as many environments as possible. It also will provide the IEP team with the data they will need to support Jeff with additional strategies if he is not able to achieve the initial goal.

Transition plan goals may be less specific than IEP goals, but very clear outcomes should be stated. Transition goals might include:

- I will live in my own apartment.
- I will get a driver's license.
- I will build a portfolio with important names, phone numbers, and email addresses.

In Jeff's case, the IEP determined that he would need to be able to follow two- to four-step directions in order to achieve any of these transition goals.

Empowering Students in the Transition Process

IEP teams must empower the student who uses AT to participate in the transition planning at a level appropriate to his or her age and ability. To do this, teams should identify specific skills that can enable the student to gradually assume such responsibility. The student should use AT tools as needed to support this participation. A useful workbook that can help students play a more active role in their transition planning is *Hey, Can I Try That?* (Bowser & Reed, 2001).

According to IDEA 2004, a vision statement based on the student's preferences and interests—including desired outcomes in adult living, post-secondary, and work environments—should be developed and documented beginning at age 14, or younger if appropriate. While IEP teams have many different methods for gathering information for transition, providing for parent and student input regarding needs, concerns, and goals is an essential part of the process.

Self-determination is critical to post-school success. Therefore, discussions should consider the following questions:

- Is the student able to describe his or her strengths and weaknesses?
- What opportunities will help the student develop the skills he or she will need to advocate and appropriately communicate in the post-school environment?
- What skills will the student need to set up his or her AT hardware or software, to tell another person how to set it up, or to understand or explain what to do if the AT breaks down?

Where appropriate, the IEP team might use a functional vocational assessment that considers vocational interests and aptitudes and availability of community training and employment opportunities and that records an actual vocational assessment score. The team can use this information to determine appropriate goals for the student, review the strategies and assistive technologies that have been used in the past, and consider how the use of these tools and strategies will be supported and integrated into community settings as responsibility for coordination changes from the school to adult services.

A statement of transition service needs under the applicable components of the student's IEP should be developed beginning at age 16, or younger if appropriate. This statement should be updated annually. In developing this statement the IEP team must consider the actual date of exit, the category of exit (exit with a state diploma, certificate prior to age 21, or certificate at age 21), and the service agency (general services, further education/training, division of rehabilitation services, developmental disabilities administration, mental hygiene administration) that will be involved.

The team should consider the technology supports the service agency can provide and determine what training will be necessary to ease the transition from the school to that agency. Individuals from the appropriate agency or agencies should be involved in the planning process once a student nears the date of exit.

The Quality Indicators for Assistive Technology (QIAT) Consortium (**www.qiat.org**) has looked at key factors involved in transitions for AT users that can be helpful in guiding teams through the transition planning process.

QIAT Indicators for AT Transitions

- Transition plans address the AT needs of the student, including roles and training needs of team members, subsequent steps in AT use, and follow-up after transition takes place.
- Transition planning for students using AT empowers the student to participate at a level appropriate to his or her age and ability.
- Advocacy related to AT use is recognized as critical and planned for by the transition team.
- Needs related to using AT in the receiving environment are determined during the transition planning process.
- Transition planning for students using AT proceeds according to a timeline based on the complexity of student's needs.
- The transition team addresses specific equipment and funding issues such as transfer or acquisition of AT and necessary manuals and support documents.

Basic Skills for AT Users

Selecting an AT tool is only the beginning. A great deal of thought must go into determining how the new tool will be implemented and supported, and consideration should be given to the new considerations required for each new environment in which the tool will be used.

To be effective users, all users of AT must develop skills in four areas (Light, 2003). They are:

- Functional skills in the area for which the technology was chosen (e.g., reading, writing, or math).
- Operational skills needed to operate or use the technology.
- Strategic skills for considering when to use the technology.
- Social skills for using the technology around other people and to help other people understand the reasons for its use.

By looking closely at each of these four skills areas, the transition team can identify the goals and benchmarks that will help to ensure the student is as independent an AT user as possible.

Functional skills

If a team has done a good job of assessing the technology, the information collection process has focused on using the technology for a particular function such as writing, reading, or speaking. All too often, however, there is an assumption that once the student learns to operate the new tool he or she will be more skilled in that area. In fact, most students who use AT still will need additional instruction. This instruction should be recorded in an IEP in the form of goals and benchmarks.

Students who use AT often must learn additional skills when they make a transition. For example, when students who use computers move from elementary school to middle school they must learn to write longer assignments or use more complicated sentence structure. Students who use Augmentative and Alternative Communication (AAC) may need to learn new vocabulary as they move from a high school setting to a community work environment.

Operational skills

Operational skills are the skills that an AT user must have in order to operate a particular device. Skills may be very simple (i.e., holding a pencil with a new pencil grip) or they may be complicated and involve many steps (i.e., typing on a computer keyboard). Operational skills may include the skills needed to operate the device, as well as the skills needed to use alternative access methods such as voice recognition and Braille note takers.

Students who are ready for a transition may need additional AT devices

in their new environment. The student may need a new device that is more portable or that can overcome new barriers. It is not uncommon for a student in transition to change from a manual wheelchair to a power wheelchair, or from a Macintosh to a Windows computer platform. Transition planning must include thoughtful consideration of the services needed to support a seamless and transparent process for resolving these kinds of issues.

Strategic skills

Strategic skills help students make choices about using AT in real-world situations. Because a specific device may help in one activity does not mean that it should be used all of the time. IEP teams must understand the settings and activities where technology will be helpful to a student and know the types of situations where no-tech strategies—such as help from a peer or a shortened assignment—might be more effective. AT users can learn a variety of skills that will help them make strategic decisions about their AT use. For example, they can learn to plan ahead to ensure that they have the tools they need in each new environment and understand how AT can be used to overcome barriers.

Social skills

Social skills relate to using technology around other people. They generally fall into three categories:

- Knowing how to use technology with courtesy.
- Knowing how to explain AT use to other people.
- Knowing how to use AT with other people

There are generally many new people to get to know when students make a transition from one environment to another. Students will need strategies to explain their devices to people who have never seen them before. Students must learn how to use their AT in new environments without interfering with the concentration or productivity of others. Just taking a walk with a new friend can be a challenge if that friend can't keep up with a very fast powered wheelchair, for example!

Self-determination Skills for AT Use

Project TechTrans (Fried-Ochen et al., 1998) found that advocacy and self-advocacy were the key ingredients to successful AT use after school. They are key because they lead to self-determination.

Self-determined students are skilled at:

- Choice making. For example, "I help choose whom to invite to my transition meetings."
- Decision making. For example, "I know how to make an informed decision."
- Problem solving. For example, "I have completed a portfolio that contains important names, numbers, and email addresses."
- Goal setting. For example, "I know how to share my goals with others."
- Evaluation. For example, "I can describe my strengths and needs."

There are other self-determination skills that a student with disabilities may need to develop when AT is part of the transition planning. Self-determined students are skilled at:

- Choice making. For example, "I know how to ask for the AT that I need."
- Decision making. For example, "I know what I like and don't like about using AT."
- Problem solving. For example, "I know how to get help when my AT is not working properly."
- Goal setting. For example, "I view assistive technology as a tool, not a solution."
- Evaluation. For example, "I can describe my strengths and needs related to using AT."

The more the student is able to make independent choices and take independent actions about its use, the more likely it is that AT will be a valued tool during and after the transition.

Following are some examples of the types of skills in each self-determination domain that students who use AT may need to learn.

Self-determined AT Users Can Make Choices About AT

They can:

- ☐ Choose what to say and which tasks to do.
- ☐ Choose whether or not they want to use a particular AT device for a task.
- ☐ Use their AT in their IEP meeting if they need to.
- ☐ Choose whether they want help with their AT or prefer to do a task independently.
- ☐ Choose who will help with their AT.
- ☐ Choose who they talk to and interact with.
- ☐ Pick the most appropriate AT tool for each situation.
- ☐ Choose where they will use AT and where they will not.
- ☐ Choose when they will use AT and when they will not.
- ☐ Know the ways that they can do a task and pick the one that suits them best.
- ☐ Choose when to use AT in the community.
- ☐ Choose when to use AT at work.
- ☐ Choose when to use AT at home.

Self-determined AT Users Can Make Their Own Decisions

They can:

- ☐ Decide what steps they need to take to meet their AT goals.
- ☐ Decide which AT goal to tackle next.
- ☐ Decide when they need to change to a new AT device.
- ☐ Execute their decisions about AT.
- ☐ Know what they want to accomplish before they start.
- ☐ Say what they really think and feel about their AT.
- ☐ Make sure their AT is there when they need it.

Self-determined AT Users Can Solve AT problems

They can:

- ☐ Know what AT problems they can solve independently.
- ☐ Know when to ask for help with AT.
- ☐ Have a plan in place for AT emergencies.
- ☐ Execute the AT emergency plan when problems arise.
- ☐ Stay with a problem until they solve it.
- ☐ Choose an advocate who knows them, their AT, and their future goals.
- ☐ Ask for help when they need it.
- ☐ Identify the times when the AT tools they have are not working.
- ☐ Get technical assistance for their AT.
- ☐ Do some maintenance independently.
- ☐ Get repairs done on AT devices.
- ☐ Know how to appeal an AT decision with which they don't agree.
- ☐ Identify other tools they do not have but may need someday.
- ☐ Choose when to use AT at home.

Self-determined AT Users Can Set AT goals

They can:

- ☐ Set realistic and reachable goals for AT use.
- ☐ Know how they will use AT after high school at home, at work, in new educational settings, and in the community.
- ☐ Know the steps they need to take to reach AT goals.
- ☐ Know when to change their AT goals.
- ☐ Work with others to set and implement new AT goals.
- ☐ Describe their strengths and AT needs.
- ☐ Tell people what their AT goals are.
- ☐ Tell people what I they want to do with their AT.
- ☐ Know when to change their AT goals.
- ☐ Explain why they want to change their AT goals.

Self-determined AT Users Can Evaluate Their Own Performance

They can:

- ☐ Take responsibility for their AT.
- ☐ Know their legal rights about AT devices and services.
- ☐ Identify mistakes they have made.
- ☐ Talk about their AT mistakes
- ☐ Know the changes that they need to make to improve performance using AT.
- ☐ Identify the help they need to improve their performance.
- ☐ Know the people who can provide help with AT devices and services.
- ☐ Know who can help them advocate for new AT devices and services.
- ☐ Keep a record of important AT names and phone numbers.
- ☐ Arrange to get the AT help they need.
- ☐ Use AT help from others when it is available.
- ☐ Persist in working with others when things are not easy.
- ☐ Describe to others what AT does for them.
- ☐ Describe to others the best way to support their use of AT.

Conclusion

Educators who want to help students who use AT successfully navigate transitions can address a variety of important skills from the first time those students use AT. Educators can help students learn to be responsible for their AT. They can address self-management and independence for AT use. Even very young students can learn how to decide on the most appropriate tool for each situation.

Educators can help students understand how their AT may affect them in social situations. Younger students can begin to develop self-determination skills to ensure that their AT becomes an integrated part of their normal daily encounters and routines. The earlier self-determination is addressed in students educational programs, the more likely they are to make successful transitions from the school to the community.

Transitions work best for AT users when long-term services and supports are identified, when the students are actively engaged in the process, when others in the environment expect them to use AT, and when the students have self-determination skills.

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